Statement of J. Donald Collier, Air Transport Association
at the FAA Public Meeting on the Standardization of the Requirements of
Airworthiness Directives that Mandate Supplemental Structural Inspection Documents
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Thank you for the opportunity for the airlines to address the FAA and this audience today on the maintenance of aging airplanes. First, I would like to acknowledge the critical leadership of FAA over the past 15 years in addressing the important and complex phenomena of aging aircraft structure. This most recent Agency action, an Interim Final Rule adopted December 6, 2002 in response to the Aging Aircraft Safety Act of 1991, will add another layer of protection to the aircraft fleet as natural usage increases its age. We hasten to point out, however, that the safety record of the airlines is already at a state of excellence, achieving the goal of zero fatalities in the past year. That's the second time in the last five years and the third time in the last ten years – an astounding achievement, that seems on the verge of becoming routine.

FAA has already taken a number of regulatory actions to address aging aircraft structure - airworthiness directives to implement Supplemental Inspection Programs; airworthiness directives to implement Corrosion Control Programs; certification regulations to implement damage tolerance in design; and operating rules to implement repair assessment programs for certain older airplanes. To a varied degree, these pre-existing regulations require inspections and the accumulation and reporting of records of what was found and what was done in response to inspection findings. The latest Interim Final Rule appears to duplicate some of the previous regulatory requirements and has, frankly, left the airlines with a measure of confusion about what is to be required and when. We are here to work cooperatively with FAA and the airframe manufacturers to sort out the exact requirements.

One area in which some confusion remains is the question of timing of the records reviews and aircraft inspections required by Section 121.368(b). Our reading of the rule is that carriers and FAA inspectors should work together to schedule the required inspections to coincide with existing heavy maintenance check (HMC) inspection schedules. FAA states in the Preamble to the Interim Final Rule that FAA expects airlines to identify the most comprehensive HMC within the interval identified in the rule as the time for the conduct of the inspections and records reviews. This implies that HMC schedules do not need to be tailored to the compliance dates in 121.368. FAA also says that it is not the FAA's intent to disrupt operators' maintenance in such a way that it would adversely impact their schedules. Some parties, however, have interpreted this section as requiring adjustment of scheduled hangar visits by airplanes to meet the dates specified in Section 121.368(b)(1), (2) and (3). If we have misinterpreted the rule and Preamble in this respect, FAA is requested to tell us so immediately. If not, it would be helpful for FAA to quickly publish guidance that removes any doubt about its intent.

The reason this issue is so important to airlines is that the scheduling of heavy maintenance visits affects many aspects of airline planning, including available hangar

space, manpower planning, crew schedules, flight schedules and numerous related factors. The domino effect of any changes to HMC schedules can be far-reaching and disruptive. Therefore, we urge FAA to develop pragmatic guidelines for airlines and FAA inspectors to follow as they set advanced schedules, with a reasonable amount of flexibility included, for the required inspections. Moreover, we feel that the provision by FAA of an adequate number of specifically trained inspectors will be crucial to the success of these inspections.

The second major area of concern with the airlines is the requirement under Section 121.370a to have damage-tolerance-based inspections and procedures incorporated into their maintenance programs by December 5, 2007. This requirement leaves many questions unanswered regarding exactly what information needs to be placed into the operators' manuals. Some people also question whether this section requires the completion of all related inspections on each airplane prior to the December 5, 2007 compliance date, or whether only the maintenance manual needs to be updated by that date with information sufficient to establish when such inspections have to be completed (perhaps as a percentage of the design service goal as is the case with certain damage-tolerance programs in place today).

Moreover, the materials to be placed in operators' maintenance programs pursuant to this provision presumably resemble the programs currently in place for post-amendment 25-45 airplanes (and this material may not be complete for all primary structure). If this is the case, a substantial amount of work needs to be completed by the airframe manufacturers, particularly for pre-amendment 25-45 airplanes, in order for operators to incorporate such material into their maintenance manuals. Manufacturers have indicated that approximately five years is needed to develop such materials. This obviously does not support compliance by December 2007 if airplanes need to have damage-tolerance programs in place by that time pursuant to Section 121.368(b)(1). This difficulty is particularly ominous if pre-existing repairs, alterations or modifications must be assessed by the operators' damage-tolerance-based maintenance program prior to the December 2007 deadline. We need FAA clarification as to what these requirements actually are, and how operators are expected to meet them.

We note with some disappointment that FAA in this rule directly imposes on the airlines a requirement that, in order to be met, invokes voluntary participation by third parties - in this case, the airframe manufacturers - as a condition precedent to compliance. It is axiomatic that the information - flight loads, landing loads, design details, etc. - needed to perform damage-tolerance assessments is in the possession of the original equipment manufacturer (OEM), and is usually held as proprietary information. Therefore, should the OEM opt not to perform the DT guidance development, the airline is faced with dire circumstances for compliance. While we expect cooperation from the manufacturers in this case, FAA's rulemaking approach gives the operators no reasonable alternative if the manufacturers don't volunteer. Carriers simply cannot comply otherwise because they lack the tools. A more equitable rule would establish a direct requirement on the manufacturers to provide the needed data so that airlines are not forced to ground airplanes due to the failure of manufacturers to perform. Compliance

obligations for *operators* should begin only when compliance by the manufacturers is completed.

ATA is conducting a survey of its members to determine the degree to which damage-tolerance guidance is or is not available to support compliance with Section 121.370a. The survey is not complete, as the complexity of the issues is great, but we will summarize generally our preliminary returns.

Damage tolerance guidance is typically much better for all post-amendment-45 airplanes than pre-amendment-45 airplanes, but there remain questions in operators' minds regarding the completeness of coverage in Structural Repair Manuals. There is also the question of whether *minor* repairs require DT assessment, or does DT assessment only apply to *major* repairs, alterations and modifications (RAMs)? While we read the rule to apply only to major RAMs, some carriers are questioning whether that is totally clear. In addition, with respect to structure, such as landing gears, that is not amenable to DT programs, is DT coverage still required to be in the operators maintenance manual by December 2007? FAA should clarify these matters in guidance materials.

The Boeing 727 is an example of a fleet that has mixed coverage of DT guidance. Guidance was developed by Boeing to support the FAA Repair Assessment Rule, and a SID AD was issued with certain DT principles imbedded. Yet, the RA rule addresses only the pressure vessel and the AD addresses only certain Principal Structural Elements (PSEs). Much of the remaining structure is without coverage in Boeing documents. Also, since about three-fourths of the ATA 727 fleet is in the over-24-years-old category, the need for such guidance is immediate, especially if you interpret the Interim Final Rule to require completion of inspections by December 2007. While a number of carriers are reducing their 727 fleets, we expect that ATA members will carry at least 200 airplanes through the initial compliance dates.

About 70 DC-8s are still in the ATA fleet, all of which are over 24 years old. While DT guidance is available to support the Repair Assessment Rule, this coverage is limited to the pressure vessel, just as the case is with 727s and all of the other airplanes addressed by the repair assessment rule.

The vast majority of Airbus airplanes operating in the fleets of ATA members are post-amendment-45 airplanes. As stated above, damage-tolerance guidance for post-amendment-45 airplanes is generally more comprehensive than for pre-amendment-45 airplanes, but there is uncertainty regarding the completeness of the guidance to enable airlines to meet all the requirements of the Interim Final Rule.

Of the twelve airplane models addressed by the Repair Assessment Rule, we are not aware of any that has complete DT coverage of the primary structure, as would seem to be required by the Interim Final Rule. We need FAA clarification as to its intent in this regard. This is crucial, because a preliminary assessment indicates that over half of the ATA fleet is in the pre-amendment-45 category.

These are some of our concerns about the Interim Final Rule, and we seek early FAA clarification of them. We also have concerns about the impact of the rule and will submit comments to the docket detailing the impact we expect to be incurred, along with suggestions for ameliorating the impact while maintaining the intent of the Aging Aircraft Safety Act of 1991.

Thank you again for making this opportunity available to register these concerns. We look forward to working with FAA and the manufacturers to the end of complete and efficient achievement of the goals of the Aging Aircraft Safety Act.